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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/654,306	09/01/2000	Donald E. Mosier	00CR104/KE	5633
7	590 08/08/2002			
Rockwell Collins Inc Attn Kyle Eppele 400 Collins Rd N E			EXAMINER	
			KOVALICK, VINCENT E	
Cedar Rapids, IA 52498			ART UNIT	PAPER NUMBER
			2673	
			DATE MAILED: 08/08/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
Office Action Summers	09/654,306	MOSIER, DONALD E.				
Office Action Summary	Examiner	Art Unit				
The MAILING DATE of this communication and	Vincent E Kovalick	2673				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	eid(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on <u>01 S</u>	September 2000 .					
2a)☐ This action is FINAL . 2b)☑ Thi	is action is non-final.					
3) Since this application is in condition for allowa closed in accordance with the practice under a Disposition of Claims						
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application						
4a) Of the above claim(s) is/are withdraw	vn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-20</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner						
10)☐ The drawing(s) filed on is/are: a)☐ accep						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on	• • • • • • • • • • • • • • • • • • • •	Ved by the Examiner.				
If approved, corrected drawings are required in rep 12) The oath or declaration is objected to by the Exa	•					
Priority under 35 U.S.C. §§ 119 and 120	arriirer.					
13)☐ Acknowledgment is made of a claim for foreign	priority under 25 LLS C & 110/o) (d) or (f)				
a) All b) Some * c) None of:	priority under 33 0.3.0. § 119(a)-(u) or (i).				
1. Certified copies of the priority documents	s have been received					
2. Certified copies of the priority documents		on No				
Copies of the certified copies of the prior application from the International Bur See the attached detailed Office action for a list of the certified copies of the prior application.	ity documents have been receive eau (PCT Rule 17.2(a)).	ed in this National Stage				
14) Acknowledgment is made of a claim for domestic	•					
a) The translation of the foreign language pro-	visional application has been rec	eived.				
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	v (PTO-413) Paper No(s) Patent Application (PTO-152)				

U.S. Patent and Trademark Office PTO-326 (Rev. 04-01) Application/Control Number: 09/654,306 Page 2

Art Unit: 2673

DETAILED ACTION

1. This Office Action is in response to Applicant's Patent Application, Serial Number 09/654,306, with a File Date of September 1, 2000.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bassetti et al. (USP 5,757,338).

Relative to claims 1, 8 and 12, Bassetti et al. **teaches** EMI reduction for a flat-panel display controller using horizontal-line based Spread Spectrum (col. 6, lines 13-67; col. 7, lines 1-8 and Fig. 7). Bassetti et al. further **teaches** an apparatus comprising: means for controlling a display (col. 6, lines 13-16; col. 8, lines 52-54 and Fig. 7); and means for buffering input data received from a data source provided to said controlling means (col. 6, lines 14-16); and said controlling means being adapted to provide a modulated driving signal to the display wherein at least one frequency component of the modulated driving single is attenuated by the modulation

Application/Control Number: 09/654,306 Page 3

Art Unit: 2673

such that emanated electromagnetic emissions are reduced (co. 6, lines 13-14 and col. 8, lines 52-54); further still, Bassetti et al. **teaches** means for providing input to be displayed in the display to said controlling means (col. 8, lines 54-64 and Fig. 7, item 50), and input data providing means being adapted to provide a modulated input data signal to said controlling means to accommodate the modulated driving signal provided by said controlling means to the display (col. 8, lines 56-64; col. 9, lines 46-48 and 64-67; col. 10 lines 1-5 and Fig. 7).

The difference between the teaching of Bassetti et al. and the instant invention is that Bassetti et al. teaches as system that includes EMI reduction consideration for both a CRT and a LCD included in the same system, wherein the instant invention teaches a system considering EMI reduction for flat panel displays, and does not consider CRT's.

It would have been obvious to a person of ordinary skill in the art at the time of the invention that the teachings of Bassetti et al. address the limitations as set forth in claims 1, 8 and 12 of the instant invention.

Regarding claims 2, 9 and 13, Bassetti et al. **teaches** said apparatus wherein the modulated driving signal provided by said controlling means is being a spread spectrum modulated signal (col. 8, lines 15-17).

Relative to claims 3, 10 and 16, Bassetti et al. **teaches** said apparatus controlling means comprising a controller structure (col. 8, lines 52-54 and Fig. 7).

Regarding claims 4 and 19, Bassetti et al. **teaches** said apparatus buffering means comprising a memory structure (col. 8, lines 61-64).

Application/Control Number: 09/654,306 Page 4

Art Unit: 2673

Relative to claims 5, 14 and 20, Bassetti et al. **teaches** an apparatus wherein said buffering means comprises a FIFO memory structure (col, 8, lines 61-64).

Regarding claim 6, Bassetti et al. **teaches** said controlling means comprising a controller structure, said buffering means comprising a FIFO memory structure, and the modulated driving signal provided by the controller structure being a spread spectrum signal (col. 8, lines 52-54 and 61-64, and col. 9, lines 46-48 and Fig. 7).

Regarding claims 7 and 11, it would have been obvious to a person of ordinary skill in the art at the time of the invention that the apparatus as taught by Bassetti, et al. is adaptable for application in an avionics environment in that it could be cast in a structure designed to be compatible with an avionics environment.

Relative to claim 15, Bassetti et al. **teaches** said apparatus further comprising means for providing input data to be displayed in the display to said controlling means (col. 8, lines 61-64), said input data providing means being adapted to provide a modulated input data signal to said controlling means to accommodate the modulated driving signal provided by said controlling means to the display (col. 9, lines 56-67; col. 10, lines 1-3 and Fig. 7).

Regarding claims 17 and 18, Bassetti et al. **teaches** said apparatus causing means comprising a modulating circuit structure; and controlling means comprising a controller structure (col. 9, line 46-67 and Fig. 7).

Application/Control Number: 09/654,306

Art Unit: 2673

Conclusion

Page 5

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent No.	6,377,646	Sha
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U. S. Patent No. 6,057,809 Singhal et al.

U. S. Patent No. 5,736,893 Puckette et al.

IEEE Catalog No. 94CH3347-2 Hardin et al.

Art Unit: 2673

Responses

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent E. Kovalick whose telephone number is (703) 306-3020. The examiner can normally be reached Monday-Thursday from 9:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at (703) 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Inquires

6. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Vincent E. Kovalick

BIPIN SHALWALA SUPERVISORY PATENT EXAMINED TECHNOLOGY CENTER 2301